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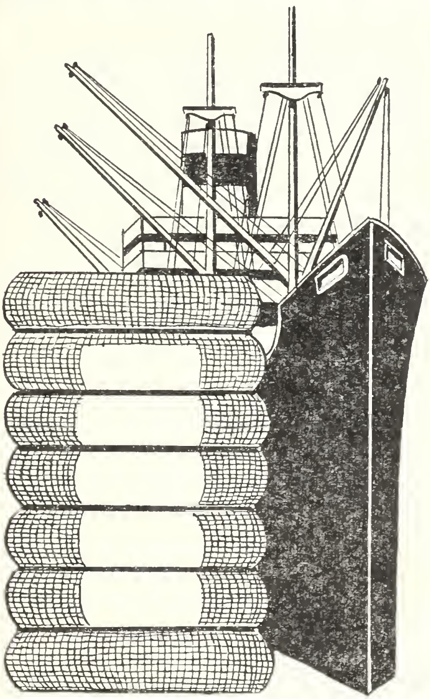
COTTON EXPORT EXPLANATION:
HOW PRICE SHIFTS AFFECT US



Cotton has long been the most valuable cash crop grown in the United States. It accounted for about 7 percent of farmers' total cash receipts during 1964. And in many States, Mississippi for example, cotton accounts for the major share of cash farm receipts.

However, whether cotton will remain so important as a source of farm income in the future has been of major concern. A big part of cotton's future is exports. Many factors influence them, but economic ones have the most effect.

During 1955–64, U.S. cotton exports averaged 5.2 million bales—37 percent of domestic production for that period. World exports ranged from 13.1 million bales in 1955–56 to a record 18.0 million in 1963–64. But the U.S. share has trended downward. Before the mid-1930's, U.S. exports accounted for more than half of world cotton trade. The 1961–64 share averaged about 28 percent.

World cotton production and consumption trended upward during 1955–64.

Production had reached a pre-World War II high of 39 million bales in 1937 but dropped sharply during the war, declining to 21.1 million bales in 1945. Following the war, production began rising again and reached a postwar high of 42.2 million bales in 1953. It continued trending upward and in 1964 totaled 51.9 million bales, a record high. Average production for 1959–

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63 was 47.3 million bales—55 percent larger than in 1934–38.

Production gained because more countries began producing cotton, and yields were rising. Consumption rose because textile industries were being developed and expanded in some producing countries.

Over the years, the world carryover has varied a great deal. It was a record 29.8 million bales on August 1, 1945, but by August 1, 1948, it had declined to 14.6 million. After increasing in 1949 and 1950, stocks again slipped, totaling 12.1 million bales in 1951, the lowest since 1930. During the next 5 years, they increased sharply and in 1956 were 25.2 million bales. During the next 6 years, consumption exceeded production, so stocks declined. But in 1962–64 they rose again.

World output exceeded consumption in 1962–64 by an average of 2.6 million bales. Most of the world excess was represented in U.S. stocks; foreign Free-World inventories remained rather stable.

Manmade fibers have intruded on the world cotton scene, just as they have in the United States. World consumption of them rose from 2.1 billion pounds in 1947 to 10.9 billion in 1964. Since cotton use didn't match this growth, cotton's share of total fiber consumption dropped from 73 percent in 1949 to about 62 percent in 1964.

Cotton prices in foreign import markets have fluctuated widely since the end of World War II. When the Korean conflict began, world prices advanced sharply, then dropped suddenly in 1951–52 as world production rose. During the rest of the 1950's, large supplies continued to press world markets. By mid-1959, prices were the lowest in many years. They strengthened over the next two seasons, then weakened in 1963 following record foreign crops and a slowdown in textile activity.

Cotton prices aren't alone in affecting world consumption. Population, the level of economic activity, and competing fiber prices also enter in. According to a recent analysis, three factors could explain most of the variation in world cotton consumption during 1948–62. These were world cotton prices, world index of industrial production, and manmade fiber consumption. On the average, a 1-percent increase in the world cotton price resulted in a 0.25-percent decline in consumption.

An analysis of foreign Free-World cotton mill consumption showed that per capita income, cotton prices, and manmade fiber consumption explained 85 percent of the variation. Using 1963 world prices, a 1-cent-per-pound price decline resulted in a 135,000-bale gain in foreign Free-World consumption (at 1963 population).

For foreign Free-World cotton acreage, world prices and trends explained 97 percent of the variation. A 1-cent change in the world price was associated with a 228,000-acre shift in the same direction the following year. Using average 1963 yields, this would represent about 100,000 bales.

The effect of a 1-cent-per-pound price change on demand for U.S. cotton, other factors unchanged, would be the total of the shifts in foreign Free-World consumption and production. So, assuming no changes in stocks, FFW demand for U.S. exports would be increased by 235,000 bales with a 1-cent price decline. If the price change were maintained over a number of years the response probably would be even greater.

William E. Cathcart
James R. Donald
Economic Research Service

The Agricultural Situation is sent free to crop, livestock, and price reporters in connection with their reporting work.

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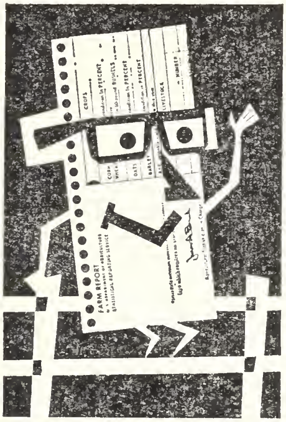


Sam Stat Says

Hi neighbor! **I'm Sam Stat—the new man on the SRS team.**

Look for me! I'll be telling you about important surveys, reminding you to get your returns in, thanking you for mailing them on time, and letting you know the results. And I also want to help the public make better use of agricultural statistics.

But right now I'd like to let you all know how much we in SRS value you and your time and effort as crop, livestock, and price reporters.

Be seeing you!

SKIP-ROW COTTON RULES

May Change Your Profit Picture

Still confused about the change in rules for measuring cotton in skip-rows? Some conclusions in a report from the Arizona Agricultural Experiment Station may clear things up. Here's the gist of the report:

From 1962 to 1965, skip-row cotton production generally was very profitable. Patterns with less than four rows skipped—such as "plant 2, skip 1"—were widely used. By 1965, Arizona producers were planting 55 percent of allotted acreage in skip-rows, compared with only 13 percent in 1961.

But in 1966 and succeeding years, skip-row cotton will be less profitable compared with alternative land uses. Under the Food and Agriculture Act of 1965, new rules for measuring such acreage are in effect and support prices for upland cotton will be much lower than in the past.

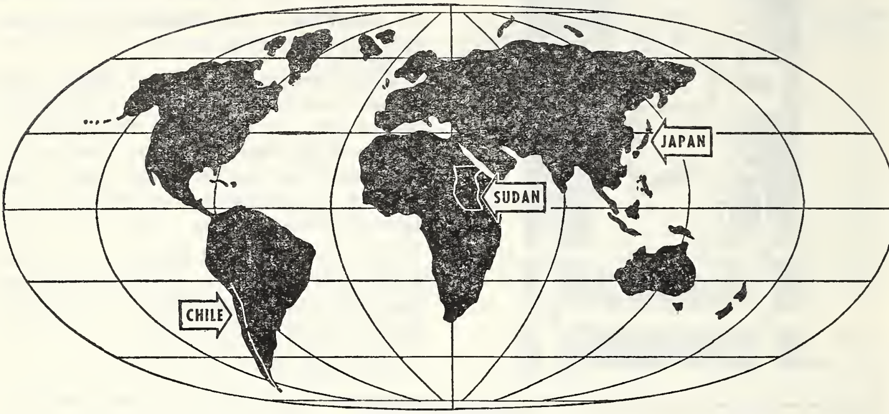
Under the new rules, a planting pattern with less than four rows skipped won't be profitable because the actual cotton acreage must be reduced if such a pattern is used. Higher returns are likely from a pattern with four or more rows skipped, such as "plant 4, skip 4." And generally, most central Arizona farmers will lose money by cutting down on acreage of other crops in favor of skip-row cotton.

But many farmers can still profit from skip-row cotton by using the idle land in skips to fill either diverted acreage or conserving use requirements. Farmers can usually fit their diverted acres in their cotton fields by using a "plant 8, skip 4" or similar pattern (or combination of patterns). This will provide enough idle acreage to meet diversion requirements. Farmers who have fallow land that cannot be planted to a commercial crop because they must maintain their normal conserving base acreage can also profitably use skips for this purpose.

For producers with very high cotton yields, skip-row production is likely to be more profitable relative to other land uses than on most central Arizona farms. And because Acala cotton responds better to skip-row planting than Deltapine and sells for a higher price, producing it may also be more profitable than alternative crops.

Since price supports on long-staple cotton haven't been reduced, growing it in skip-rows, such as "plant 4, skip 4," will also continue to pay off.

SRS KNOW-HOW ON THE GO



CHILE

Chile is the longest country north and south in the world, with an average width that varies between 100 and 150 miles. It is roughly 2,900 miles long—a distance that would easily extend from New York City to Los Angeles. If you could lay Chile along the west coast of North America it would run from southern California to Alaska. This is more than an illustration of size because the climates and agricultures of Chile and our west coast are much the same.

The northern third of Chile is a huge desert, while the central third contains a great valley where temperate climate agriculture flourishes. The southern third is made up of numerous lakes, rivers, and great forests much like our Northwest and the coasts of Canada and Alaska. The country ends in the cold, forbidding Antarctic.

I was in Chile during most of February and March when the harvest was just starting. My time there was devoted to helping that country establish and operate a current crop reporting service. Coming from the United States where important statistical information is constantly available on nearly every facet of agriculture, I was startled to find a place where very little is known about how much food is produced *or* how much the people eat.

Some folks will still say that Chile's lack of facts and figures is fine because farmers and businessmen don't have to complete and return Government questionnaires. This may be so, but when I was in Santiago, the capital, we could only buy beef on Friday, Saturday, and Sunday. And this was the case in a country where the people have always dearly loved to eat beef.

Historically, the Chileans seemed to have an ample beef supply. But Chile, like every other country, has experienced a sharp population gain during the last decade. Evidently the people simply ate beef faster than they could raise it. But they haven't been able to correct the situation because they haven't had a crop and livestock reporting system. One reason they haven't shifted more of their agricultural resources into beef production is because they haven't had any current, reliable estimates of cattle numbers or per capita consumption to gage changes.

So, we did start a crop reporting service in Chile. Beginning the last week in April, a survey was conducted to determine the production of major crops last year. Although some censuses and surveys were taken in the past, by the time they were published they often were out of date. The new system will give the Chileans more current estimates so that they can make decisions in time to change production plans.

G. D. Simpson

SUDAN

Can you visualize a country as large as the United States east of the Mississippi—with an almost perfectly flat terrain—where only about 3 percent of the land is under cultivation? Where climatic conditions range from tropical rainlands to desert with no rain? Where the temperature never drops below 40 degrees but often tops 115 degrees?

These are the physical and climatic highlights of the Sudan, Africa's largest country. This independent nation of approximately 14 million people, immediately south of Egypt, is one of the most promising of the world's underdeveloped countries.

Although efforts are being made to expand Sudanese industry, agriculture is likely to remain the basis of the economy for many decades. Currently, the Sudan depends almost totally on farming, with over 90 percent of the value of all exports derived from agricultural products.

Cotton, both long-staple and American upland types, is the main Sudanese cash crop, with production actively sponsored by the government and marketing rigidly controlled. Gum arabic is the country's second leading cash crop. The Sudan enjoys a near monopoly of the world's supply of this forest product, used in the manufacture of confections, glues, inks, polishes, and medicines.

The typical Sudanese farmer lives in a small village near his fields. His house is made of sun-dried mud bricks or grass. Unlike most people in underdeveloped countries, the average Sudanese is adequately fed. He speaks Arabic or a local dialect, but he's likely to be illiterate. Only 10 to 15 percent of the population can read or write.

The Sudanese farm averages 42 acres. Annual cash farm income is less than $90 per capita. It is derived primarily from auctioning surplus produce in one of the larger towns.

The Sudanese government recognizes the importance of factual information upon which to build their agricultural economy. A promising beginning has been made in the field of agricultural economics, including a crop reporting service. In response to a request by the Sudanese for a review and evaluation of their work and recommendations for a future course for development, a 2-man team was supplied by the Department of Agriculture and Agency for International Development.

D. W. Barrowman
New Jersey SRS Field Office

JAPAN

The Japanese system of agricultural statistics is similar in a number of respects to that of the United States. The responsibility for collecting data and for making appropriate estimates relating to agriculture generally resides in the Statistics and Survey Section of the Economic Division of the Ministry of Agriculture. This section corresponds roughly to USDA's Statistical Reporting Service.

The functions of the Statistics and Survey Section include some activities performed by USDA's Market News Service, as well as taking the Census of Agriculture, which in the United States rests with the Department of Commerce. The activities include the collection of information about farm production and distribution of farm products to the people.

Japanese statistics concerning agricultural production provide extensive detail on the land area in various crops, yields, production, utilization, and prices. They include corresponding information on livestock and products, income, and expenditures of farm families. The latter data are a counterpart of that on income and expenditures of urban families compiled by the Bureau of Statistics in the Office of the Prime Minister.

Most information is collected by staff representatives or hired enumerators. Farmers selected in the samples are paid a small sum for keeping records. Mail surveys are used to a limited extent.

A census of agriculture is taken once every 5 years. It is much like the ones taken in this country.

B. R. Stauber

Farm Fire Facts

Farm fire and lightning losses are estimated at $187 million for 1965, down from the record $193 million in 1964. These figures are based on reports from a sample of farmers' mutual fire companies.

Fire and lightning loss rates were generally lower in 1965 for all sizes of companies, although many individual ones had greater losses than in 1964. Losses averaged about 15 cents per $100 of insurance in force, about 1 cent less than in 1964. Loss rates for companies with $20 to $100 million of insurance in force were less than for either larger or smaller firms. Smaller loss rates may be partly due to more emphasis on loss reduction and more selective writing of policies. Increasing use of deductible policies may also be a factor.

Because of better fire protection nowadays, the complete loss of a farmhouse, barn, or other major building is uncommon. Figures reported by a number of insurance companies show that less than 2 percent of all farm fire losses involve payments of $5,000 or more. However, fires causing damage of more than $5,000 accounted for 57 percent of the total amount paid out by these companies. Losses of $1,000–$4,999 accounted for 3 percent of the number and about 19 percent of total value. In contrast, 58 percent of all losses paid were less than $50 each and amounted to 3 percent of the total.

Most small-loss payments were for lightning damage to televisions, radios, electrical appliances, water heaters, and electrical circuits. Some companies reported that as many as 30 percent of their losses were for televisions and radios.

Edward I. Reinsel
Economic Research Service

DOMESTIC WOOL PRICES, INCENTIVE UP

Domestic wool prices, clean basis, in Boston increased during January–April 1966 and averaged 7 percent above a year earlier. During April 1966, prices for domestic-graded territory and fleece wool averaged 13 percent above April 1965. Growers' shorn-wool prices, grease basis, in March and April (when the new clip moved to market in large amounts), averaged about 4½ cents above a year earlier.

The 1966 national-average price to growers is expected to be moderately above the 47 cents per pound received last year.

Producers are receiving an incentive payment of $31.60 per $100 of shorn wool marketed in 1965. Payments on unshorn lambs sold during 1965 are being made to compensate for their wool at 60 cents per hundredweight. The shorn-wool payment is the amount needed to bring the national-average price up to the 1965 incentive level of 62 cents a pound. The incentive for 1966 marketings has been set at 65 cents.

Shorn-wool production this year likely will decline slightly from 1965, due to an estimated 1 percent fewer sheep. Shorn-wool output in 1965 totaled 214 million pounds, grease basis, down 4 percent from a year earlier. Pulled-wool production declined 7 percent. Total output, clean basis, amounted to 119 million pounds last year, compared with 124 million in 1964.

Twenty-five million sheep and lambs were shorn in 1965, down 5 percent from the previous season. Some of the impact of declining sheep numbers was offset by heavier average fleece weights.

U.S. consumption of wool, cotton, and manmade fibers per capita rose 10 percent in 1965 from a year earlier. The total was 45 pounds, the highest since 1943. This gain, expanded by a larger population, resulted in a record 8.8 billion pounds of total fiber used.

Per capita wool use was 2.7 pounds in 1965, 2.6 pounds in 1964. Apparel-wool use gained 14 percent while carpet-wool consumption declined 13 percent. Cotton consumption rose 6 percent; use of manmade fibers gained 17 percent over the 1964 high. Wool accounted for 6 percent of total fiber consumption, down slightly from 1964.

Larry Clayton
Economic Research Service

AGRICULTURAL IMPORTS STABLE,
But Partly Competitive Products Rise

U.S. agricultural imports for consumption totaled $4.1 billion in 1965, little changed from the previous year. A gain in supplementary (partly competitive) imports offset a decline in complementary (noncompetitive) products.

During the past decade, agricultural imports have averaged about $4 billion annually. Supplementary imports rose from $1.5 billion in 1956 to $2.2 billion in 1965. Complementary imports declined by a similar amount.

The decade gain in supplementary items was in meats and products, hides and skins, dairy products, fruits and preparations, tobacco, and vegetables. Meats alone accounted for two-fifths of the overall rise. In contrast, imports of dutiable cattle (mainly stockers and feeders) have fluctuated sharply during the decade, due mainly to changing domestic prices. However, cattle imports from Mexico and Canada have generally gone up.

Shipments of most complementary items slipped markedly during 1955–65, mainly because of lower world prices. For example, the value of coffee imports went from $1.5 billion to $1.1 billion. The average unit value declined from 52.2 cents to 37.6 cents.

From 1964 to 1965, supplementary imports went from $2,096 million to $2,248 million. Most of this increase was due to sharp gains in dutiable cattle, apparel wool, tobacco, and dairy products. Lesser gains were recorded for hides and skins, meats, copra, coconut oil, wines, and vegetables. The overall gain in these products more than offset declines in cotton, grains and preparations, sugar, and fruits and preparations. Relatively high beef prices last year stimulated imports of dutiable cattle to 1,111,000 head, 582,000 more than in 1964.

Complementary imports fell to $1,840 million in 1965 from $1,986 million the previous year. The value of coffee imports declined sharply. Other reductions were in carpet wool, cocoa beans, crude natural rubber, and tea. Only imports of bananas, spices, essential oils, and herbs were above 1964 levels.

Nonagricultural imports rose sharply to $17.2 billion in 1965. They were worth $14.5 billion a year earlier. There were larger imports of manufactured products, although shipments of raw materials—especially metals and fuels—also increased.

Dewain H. Rahe
Economic Research Service

World Travelers on Your Table

There was a time when most farm families could boast that almost everything on their tables was home produced. But nowadays, farm people are like everyone else; much of their food is store bought. Often, some of it is from countries around the globe.

Over 11 percent of all the food used by American civilians last year was imported or shipped in from U.S. territories. For the past decade, use of imported food in this country has been fairly stable, averaging about 12½ percent.

Some imports are easy to pick out—coffee, tea, cocoa, bananas, and the like. Others, meats and fishery products, aren't much different from items produced and processed in the United States.

About three-fourths of all agricultural imports (excluding fishery products) went for civilian food use during 1965. Primary nonfood imports—wool, cotton, and tobacco—accounted for 16 percent. Rounding out the list were other nonfood imports—largely hides and skins and nonfood uses of food products.

Crop products (over half coffee, tea, and cocoa) made up about 85 percent of total food import value last year. Animal products accounted for the rest. Products that don't compete with U.S. farm production were 45 percent of total import value; competitive goods were 55 percent.

Robert G. Ainsworth
Economic Research Service

Based on Information Available June 7, 1966

COTTON MILL CONSUMPTION

Cotton consumption by U.S. mills has remained at a high level in recent months. Consumption during each month of the current crop year through April exceeded the corresponding months of the past year. During the first 9 months (August 1965–April 1966), consumption was 3 percent higher than the year-earlier total. The consumption rate is expected to continue high in coming months, and total use of all kinds of cotton for all of 1965–66 is likely to total about 9½ million bales (9.4 million upland cotton). This would be 4 percent higher than the previous year. U.S. mills are expanding cotton use this year in response to increased civilian and military demand for textiles.

WHEAT DISAPPEARANCE

Total disappearance of wheat reached 1,245 million bushels during July 1965–March 1966, pointing to a record of around 1.6 billion for the entire marketing year ending June 30. This would result in a yearend carryover of around 550 million bushels, the smallest since 1952. Wheat and flour exports during July 1965–April 1966 were 20 percent above a year earlier. They are likely to total around 850 million bushels for all of 1965–66. This heavy movement reflects increased commercial exports as well as stepped-up food aid shipments to India. Because of the heavy disappearance thus far in 1965–66, the season average price received by farmers is estimated at $1.34 per bushel, 9 cents above loan. This is the largest differential since the 1947–48 marketing year. Present conditions indicate that the price is likely to remain above the price support loan during the 1966 harvest; perhaps by at least as much as that a year ago.

SOYBEAN SITUATION

Soybean prices (No. 1 yellow, Chicago) advanced from $2.49 per bushel last October to a seasonal high of about $3.06 in May, reflecting the record disappearance rate and limited supplies. For September 1965–May 1966, prices averaged $2.78 per bushel compared with $2.89 during the same months last season. Soybean prices at Chicago during June–August are expected to continue strong. Supplies during the last quarter will be slightly larger than a year earlier but crushings will likely be greater. Crushings through April are running 10 percent ahead of last year and may total around 525 million bushels for 1965–66 compared with 479 million a year ago. Exports through May are up 25 percent. For the season as a whole, exports may total around 250 million bushels compared with 212 million in 1964–65. Total disappearance of soybeans for all of 1965–66 is expected to total around 825 million bushels, more than a tenth above 1964–65. Such disposition would leave a carryover of less than 50 million bushels on September 1 this year compared with only 30 million bushels last season.

FEED GRAIN DISAPPEARANCE

Strong domestic and export demand for feed grains during October–March, first 6 months of the 1965–66 feeding year, increased disappearance to 12 percent above a year earlier and the highest on record for that period. Domestic use for all of 1965–66 is now expected to be about 5 percent over 1964–65 and exports around a third larger. Based on these prospects, total use would be around 5 million tons above the record 1965 crop. This would reduce carryover stocks into 1966–67 to around 51 million tons. Corn disappearance during October–March was record high at over 2.4 billion bushels, 9 percent above a year earlier. Use for the year ending September 30 is expected to be close to 4.3 billion bushels. This would leave a carryover next October 1 of below 1.1 billion bushels, around 10 percent less than a year earlier.

WOOL CONSUMPTION

Mill consumption of wool during 1966 likely will exceed the 387 million pounds, scoured basis, used in 1965. Apparel wool use likely will continue at the seasonally adjusted rate of early 1966 and total 290 to 295 million pounds this year compared with 275 million in 1965. Carpet wool use in 1966 will likely approximate the 112 million pounds consumed last year. Apparel wool consumption during January and February totaled 46.6 million pounds, up 20 percent from a year earlier. Use of carpet wool during the first 2 months of 1966 totaled 18.1 million pounds, unchanged from a year earlier.

LIVESTOCK PRICES BOOST RETURNS

The figures on meat animals for 1965 show less liveweight production than in 1964, but a higher value of production and gross income due to higher prices received by farmers. Here's a rundown:

Farm production of meat animals in 1965, at 52.9 billion pounds of *liveweight,* was 5 percent below the 1964 record. Output declined for each species. Hogs showed the sharpest volume reduction.

Cattle and calf production accounted for 63 percent of the total volume compared with 61 percent in 1964. Hog output made up nearly 35 percent, off from 37 percent in 1964. Sheep and lambs output was 2 percent of the total meat animal production both years.

Value of production for the three species was $10.6 billion, up 13 percent from 1964. Production values rose 8 percent for cattle and calves, 25 percent for hogs, and 12 percent for sheep and lambs. With less output, the value gains were due solely to higher prices.

Gross income (cash receipts plus value of home consumption) from meat animals last year was a record $13.3 billion, 16 percent above 1964 and 11 percent over the previous record in 1962.

Prices received per 100 pounds liveweight averaged $19.90 for cattle ($18 in 1964), $22 for calves ($20.40), $20.60 for hogs ($14.80), $6.32 for sheep ($5.91), and $22.70 for lambs ($19.90).

SLAUGHTER

Figures on meat-animal slaughter for 1965 show a decline in red-meat output, with increases in numbers of cattle and calves slaughtered and decreases for hogs and sheep.

Total 1965 red-meat production (48 States) from commercial and farm slaughter was 31,527 million pounds, down 4 percent from 1964. Beef production amounted to 18,693 million pounds, up 1 percent. Lamb and mutton output was 651 million pounds, down 9 percent. Lard production totaled 2,050 million pounds, down 17 percent.

Beef accounted for 59 percent of total red-meat production during 1965; pork, 36 percent; veal, 3 percent; and lamb and mutton, 2 percent.

The number of cattle slaughtered in 1965 increased 5 percent over a year earlier. Federally inspected cattle slaughter was up 6 percent, other commercial slaughter 1 percent.

The number of calves slaughtered in Federally inspected plants rose 5 percent last year, but other commercial slaughter slipped 4 percent.

Hog slaughter in 1965 numbered 11 percent less than 1964. The 11-percent decline occurred for both Federally inspected plants and other commercial operations.

Sheep and lamb slaughter declined 11 percent during 1965. The number slaughtered under Federal inspection was 10 percent smaller.

RANCH READING

Nineteen sixty-five was the first year in many that production conditions, prices, and operations teamed up in favor of typical western livestock ranchers.

Range conditions, very important to these ranchers, were generally good to excellent in most areas. Livestock were marketed at relatively heavier weights and in good condition.

Contrasts with 1964, a relatively poor year, were dramatic. Net production was as high or higher than in 1964 on all the typical ranches. Prices received also averaged higher for all of them. Net ranch incomes were up from around 25 percent on Northern Plains cattle and sheep operations and Intermountain cattle spreads to 369 percent on Southwest cattle ranches.

For the cattle ranches, net incomes were as follows: Northern Plains, $6,043 in 1964, $7,599 in 1965; Intermountain, $6,829 and $8,548; Southwest, $1,310 and $6,146.

For the sheep operations: Northern Plains, $11,731 and $14,965; Utah-Nevada, $14,915 and $18,335; Southwest, $3,752 and $9,312.

Feed Price Factors Tagged for Study

Feed prices are influenced by many factors—sometimes working together, sometimes offsetting each other. Take as an example such high-protein feeds as soybean meal, cottonseed meal, linseed meal, gluten feed, and meat meal. Changes in annual prices of these feeds were recently analyzed for the period 1950–64.

Of the many factors considered, four most importantly influenced prices of these feeds. They were: (1) The quantity of soybean meal or high-protein feeds fed; (2) the index of prices received by farmers for livestock and products; (3) the number of high-protein consuming animal units; and (4) production of commercially prepared feeds.

For soybean meal alone, three factors were most significant: (1) The tonnage of soybean meal available for feeding; (2) the index of prices received for livestock and products; and (3) commercially prepared feed production.

Cottonseed meal, linseed meal, and gluten feed prices were most influenced by the total quantity of high-protein feeds fed, the index of prices for dairy products and beef cattle, and numbers of dairy cows, beef cattle, and sheep combined in terms of high-protein consuming animal units.

The two demand factors—the index of prices for livestock and products, and total production of commercially prepared feeds—had the most effect on meat meal prices.

The results of this study were published in the *Feed Situation,* April 1966, FdS 213.

Malcolm Clough
Economic Research Service

GRAIN ELEVATORS' COSTS EXAMINED

A recent study examining elevators' costs for storing and handling grain should be of interest to farmers, merchants, warehousemen, and others in the grain industry.

In the study, 165 country elevators, 58 inland terminals, and 29 port facilities were selected to represent the main storage areas, types, and kinds of construction common in the United States. Accounting records were used to assess costs.

Book costs for storing and handling grain by the most common methods in country elevators averaged 10.4 cents per bushel. This included a year's storage plus receiving by truck and shipping by rail. The range was from a 9.2-cent average for the South and East to 12 cents for the Great Lakes area. Short-run competitive (out-of-pocket) costs averaged 8 cents per bushel. However, allowing for depreciation of buildings and equipment and 6 percent interest on replacement values resulted in an average cost of 13.5 cents per bushel.

At inland terminals, the book cost for 1 year's storage and receiving and shipping by rail averaged 9 cents per bushel. Averages by areas went from 8 cents for the Great Lakes to 11.6 cents for the West. Short-run competitive cost was 7 cents and long-term cost was 12 cents.

For all port facilities, the book cost for receiving by rail, storing for a year, and shipping by water averaged 9.3 cents per bushel. Out-of-pocket costs were figured at 7 cents, long-run costs at 13.5 cents.

Storage costs alone, including depreciation and interest actually paid out, averaged 5.4 cents per bushel at country elevators, 5.5 cents at inland terminals, and 7.2 cents at port facilities. The range was from 3.8 cents per bushel at Northern Plains terminals to 8.3 cents at Western ports.

Elevator services—cleaning, drying, handling, and shelling—cost the firms 1.7 cents, 3.8 cents, 2 cents, and 2.8 cents per bushel, in that order.

Joseph Ghetti
Economic Research Service

PRODUCTIVITY AND SIZE IN DAIRYING

Developing a modern, well-equipped, specialized operation isn't enough for dairymen to survive nowadays. They also need answers to questions like these: (1) Do average size and costs differ between farms with above- and below-average milk production? (2) How do income and costs change as herds become larger? (3) How do net returns change as herd size and production level increase? And (4) is it better to milk more cows or to produce more milk per cow?

Providing some answers is a recent study of costs and returns for large, specialized dairy farms in Wisconsin. Fifty farms that had been modernized and enlarged within the last 10 years were studied.

From the 50 farms, 24 with no supplementary enterprises were chosen. They were grouped according to production level—above and below average. Both groups averaged about 62 cows per farm.

The high-productivity group averaged 2,870 pounds more milk and $100 more gross income per cow than the low-productivity farms. However, these farms also had higher investments, fixed costs (interest, depreciation, taxes, and the like), and variable costs (for such things as feed, fertilizer, and medical expenses).

As a result, net income per cow averaged only $16 more for the high-productivity group. And several low-productivity farms, because of smaller costs, actually had larger net incomes than some farms in the high-productivity group.

Obviously, production level alone didn't entirely explain cost and return differences. Size of farm also had some effect. To find out, costs and returns for herd sizes from 40 to 110 cows and production levels from 9,000 to 14,000 pounds per cow were analyzed.

Cost savings due to size result because investment per cow declines as herds get larger and labor requirements for extra cows drop. In the study, doubling a 40-cow herd reduced investment per cow from $2,260 to $1,580. The operator and 1 full-time worker were needed for the 40-cow herd. But only 1 more person was needed to handle 40 more cows.

The study also showed that the average operation with 62 cows would repay all costs when 10,000 pounds of milk per cow was sold at a net $3.54 per hundredweight ($3.72 minus 18 cents for hauling). Income from milk would be $21,948 annually; dairy cattle sales and miscellaneous income would amount to $6,076. Total costs (excluding hauling but including $4,000 for operator's labor) would come to $28,024.

Higher producing herds would repay all costs with fewer cows. For example, if milk sales were 12,000 pounds per cow, a herd of 39 would break even, including $4,000 for operator's labor.

MILK SALES HAVE UPS AND DOWNS

Weight-conscious milk lovers may think they are fooling their figures. But figures—both anatomical and statistical—don't seem to fool very easily.

The anatomical kind of figure worriers can congratulate themselves on the news that sales of skim milk products went up sharply last year. But, as the statistical figures show, so did sales of sour cream and eggnog.

Average daily sales of plain whole milk in reporting State and Federal marketing areas were 1 percent above 1964. Yogurt sales dropped 15 percent. Sales of flavored whole milk rose 5 percent. Flavored skim sales (mostly chocolate) were up 3 percent while sales of plain skim milk gained 6 percent. Sales of skim milk with solids added increased 16 percent. Buttermilk sales declined 1 percent.

Sales of milk and cream mixtures (half and half in most markets) were down 2 percent while those of eggnog rose 5 percent. Light-cream sales dropped 7 percent but sour-cream sales recorded a 7-percent gain. Heavy-cream deliveries were 2 percent smaller than in 1964.

Statistical Reporting Service

FRUIT FIGURES

Production and value of many non-citrus fruits were lower in 1965 than in 1964. Here are some of the details (figures are in this order: 1965 output, 1964 output—1965 value, 1964 value):

Apricots—Production in 1965 totaled 227,200 tons, up from 224,200 a year earlier but down in value—$19.8 million last year compared with $27.3 million.

Sour cherries—Output was 176,870 tons last year, 274,240 tons in 1964. Values were $16.3 million and $23.1 million, respectively.

Sweet cherries—87,520 tons last year, 120,400 tons in 1964—$28.4 million, $34.5 million.

Figs (fresh basis)—60,900 tons versus 67,000 tons in 1964—$4.6 million, $6.3 million.

Nectarines—67,000 tons, 75,000 tons—$5.6 million, $7.1 million.

Grapes—4.4 million tons, 3.5 million tons—$205.1 million, $219.5 million.

BERRY BUILD-UP

A total of 18,620 acres of bush berries (for which estimates are made) will be harvested in Washington and Oregon during 1966. This is a 5-percent gain over 1965.

Increased acreage is indicated for all types except red raspberries and currants. New acreage of black raspberries, blackberries, boysenberries, and youngberries accounts for most of the increase.

Peaches—73.9 million bushels, 74.5 million bushels—$150.4 million, $159.6 million.

Pears—20.7 million tons, 30 million tons—about $66.7 million both years.

Plums—125,300 tons, 127,500 tons—$16.1 million, $17.3 million.

Prunes (fresh equivalent)—480,100 tons, 521,600 tons—$42.1 million, $46.6 million.

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Rio Grande Citrus Market Surveyed

Get the overall marketing picture? Sometimes it's tough—particularly if you're a producer busy getting your work done. But researchers often can take a look at conditions in a given area and bring things into focus. Such a marketing study recently covered the lower Rio Grande Valley citrus market. Here are some of the conclusions:

—The market was fairly competitive. There were enough firms at the grower, shipper, and buyer levels to make it difficult for any one firm to dominate. New shipping firms could start up and old ones quit with relative ease.

—The pricing system was efficient. The "translation" of f.o.b. prices to grower prices was reasonably good during the marketing season. It was less efficient, but still reasonable, for periods of less than a week. However, the extensive practice of contracting sales before harvest prevented changes in f.o.b. prices from being immediately passed on to growers.

—Cooperatives had lower shipping point margins (differences between f.o.b. prices and growers' prices) than independent shippers. This probably provided some incentive for other shippers to reduce margins. However, the market influence of cooperatives is limited in situations wherein growers are dependent on packers for financing and contract their fruit for sale before harvest.

—There was no consistent pattern of higher average season prices for f.o.b. sales than for delivered or consigned sales. Auction prices were generally lower than prices for other terms of sale.

—Despite the lag due to contracting, f.o.b. blend prices—weighted average prices of all grades and sizes of fruit—and growers' prices generally followed similar trends over the season.

—Lower Rio Grande Valley shippers were only moderately efficient in adjusting to different prices for various types of containers.

—Buyers tended to limit purchases to one shipper per day and to a selected group of shippers during the season.

Joseph C. Podany
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MEET THE STATE STATISTICIAN . . .

ROGER SUTHERLAND

Almost all the folks who work for SRS like their jobs—and they usually give highly individual reasons why. For example, Roger H. Sutherland, Statistician-in-Charge in Iowa, says he likes the change of environment and scenery that comes with shifts in assignments. Another reason Roger gives is the constant challenge of preparing accurate forecasts of acreages, yields, and the like.

Roger was born in 1911 on a 120-acre general farm near Grandy, Minn. (about 50 miles north of Minneapolis). During threshing season in 1918 his father died in a flu epidemic.

Fortunately, Roger's uncle was able to help operate the farm awhile, then his mother rented out the land. During these years, Roger and his two younger brothers did a lot of ballplaying, hunting, trapping, and fishing and swimming.

As Roger and one brother reached high-school age, the family moved to Minneapolis to make it easier for them to finish their education. After graduation, Roger worked 2 years to earn money for college. These savings and some part-time work carried him through 2 years of agricultural engineering at the University of Minnesota.

While there, Roger went out for football and baseball. His interests led him to transfer to physical education in the spring of 1932. However, the next fall, he hurt his knee playing varsity football, ending his athletic participation. So he transferred to agricultural economics.

To stay in school, Roger continued to work summers and part time at a variety of jobs. One of them—an assignment with the National Youth Administration on a cost-of-living survey in the Twin City area—sparked his interest in statistics as a career.

When Roger graduated in the spring of 1935, job opportunities were pretty scarce. So, he held several temporary positions before he took a civil service exam in 1940.

Roger's first civil service appointment was as a junior economist with the Soil Conservation Service at Albuquerque, N. Mex. He had been with SCS about a year when their appropriations were reduced. He then transferred to the Farm Security Administration (now Farmers Home Administration) office.

In 1943, Roger took another civil service exam, this time in agricultural statistics. He was offered an appointment as an agricultural statistician in the New Mexico office. He was transferred to the Louisiana office in 1945 and to Washington, D.C., in 1950. While in Washington, he worked with farm labor figures, then in field crops. In 1958, Roger became Statistician-in-Charge in New Mexico. And in 1964, he took over the same job in Iowa.

Roger married Ruth Graebner in St. Paul in 1939. They now have four girls. Two are married and one has two children, a boy and a girl. The third daughter is at the University of New Mexico and the youngest is graduating from high school.

FLOWERY FACTS

The term "farm products" takes in a lot of things. Among them are horticultural products; probably the most important of these is cut flowers. Each year, the Crop Reporting Board issues a report on the important cut flowers—carnations, chrysanthemums, gladiolus, and roses.

Sales of these four flowers grown in 1965 were valued wholesale at $108.1 million. This is 8 percent above the 1964 figure. All 11 States in the survey showed an increase in value for 1965.

The wholesale value for carnations was nearly $30 million in 1965, up 6 percent. Mums were valued at $34.9 million, a gain of 10 percent; gladiolus at $15.3 million, up 5 percent; and roses at nearly $28 million, up 11 percent. For mums, the standard varieties and the pompon types shared about equally in the total value.

California remained the leading producer of carnations, roses, and standard mums last year. Florida led in the production of gladiolus and pompon mums. Based on the wholesale value of the four cut flowers, California ranked first with $29.7 million, followed by Florida with $17.7 million, and Pennsylvania with $11.5 million.

During 1966, growers intend to up the number of carnation plants in production by 1 percent, in contrast to no change the year before. All States except New York, Indiana, and Illinois expect to have more plants this year.

A 6-percent increase in the number of standard mum plants is indicated. Only New Jersey and Pennsylvania show declines. Growers indicate a 3-percent gain for pompons. Intentions for smaller plantings in New Jersey, Pennsylvania, Ohio, Indiana, and Colorado are more than offset by gains in other States.

Gladiolus acreage is reported reduced 2 percent. Florida is the only State to show a gain.

Rose producers plan to plant 3 percent more bushes in 1966. Small declines in New York, Illinois, and Florida are overshadowed by gains elsewhere.

Earl L. Park
Statistical Reporting Service

June 1966

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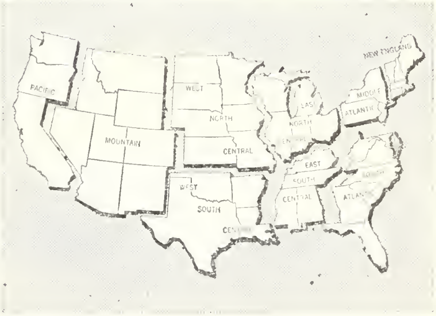

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